

Claims

- [c1] WHAT IS CLAIMED IS
1. A computer-readable medium having computer executable instructions for dynamically representing a contact availability status for at least one entity, said computer executable instructions comprising:
providing a user interface for specifying each entity;
accepting contact availability data representing at least one contact method for each entity from at least one electronic information source;
dynamically determining a real-time availability status of each entity for each contact method; and
graphically representing the real-time availability status of each entity via the user interface within a persistent window rendered on at least one display device.
 - [c2] 2. The computer-readable medium of claim 1 wherein at least one entity is specified automatically.
 - [c3] 3. The computer-readable medium of claim 1 wherein graphically representing the real-time availability of each entity comprises displaying a graphical representation of each entity using a dynamic thumbnail.
 - [c4] 4. The computer-readable medium of claim 1 wherein graphically representing the real-time availability of each entity comprises using a graphical representation of eye contact for each entity to provide a social cue for indicating whether each entity is available.
 - [c5] 5. The computer-readable medium of claim 1 wherein the persistent window further comprises at least one container within which the graphical representation of the real-time availability status of each entity is provided by using a dynamic thumbnail.
 - [c6] 6. The computer-readable medium of claim 5 wherein the container further includes at least one thumbnail for representing information other than contact availability status for an entity.
 - [c7] 7. The computer-readable medium of claim 6 wherein the information other than contact availability status for an entity includes any information accessible via at least one electronic information source.

- [c8] 8. The computer-readable medium of claim 1 wherein accepting contact availability data comprises pulling the data from the at least one of the electronic data sources.
- [c9] 9. The computer-readable medium of claim 1 wherein accepting contact availability data comprises receiving contact data that is pushed from at least one the electronic data sources.
- [c10] 10. The computer-readable medium of claim 1 wherein accepting contact availability data comprises both pulling contact availability data from at least one of the electronic data sources and receiving contact availability data that is pushed from at least one of the electronic data sources.
- [c11] 11. The computer-readable medium of claim 3 wherein each dynamic thumbnail comprises a combination of:
a ticket which defines the entity; and
a viewer for displaying the ticket.
- [c12] 12. The computer-readable medium of claim 1 wherein each thumbnail is sharable.
- [c13] 13. The computer-readable medium of claim 3 wherein at least two thumbnails are aggregated into at least one recursively nested group, each group, and each thumbnail within each group, being accessible via the user interface.
- [c14] 14. The computer-readable medium of claim 13 wherein each recursively nested group is represented by a group thumbnail.
- [c15] 15. The computer-readable medium of claim 14 wherein each group thumbnail displays a summary of any thumbnails and groups aggregated within the recursively nested group represented by the group thumbnail.
- [c16] 16. The computer-readable medium of claim 3 wherein the user interface further includes a manager for providing user interaction with each thumbnail.
- [c17] 17. The computer-readable medium of claim 3 wherein each thumbnail includes a visibility flag for either hiding or displaying each thumbnail.
- [c18] 18. The computer-readable medium of claim 17 wherein the visibility flag is set automatically.

- [c19] 19. The computer-readable medium of claim 17 wherein the visibility flag is set via the user interface.
- [c20] 20. The computer-readable medium of claim 3 wherein the thumbnails are timed, and wherein the thumbnails are automatically displayed at predetermined times.
- [c21] 21. The computer-readable medium of claim 20 wherein the displays of the automatically displayed thumbnails are automatically terminated at predetermined times.
- [c22] 22. The computer-readable medium of claim 3 wherein each thumbnail is selectable via the user interface, and wherein a person window for providing detailed information for an entity represented by one of the thumbnails is automatically opened by selecting that thumbnail via the user interface.
- [c23] 23. The computer-readable medium of claim 22 wherein each person window further comprises a list of actionable communication access points for the entity represented by the thumbnail.
- [c24] 24. The computer-readable medium of claim 22 wherein a best available communication access point is automatically identified within the person window..
- [c25] 25. The computer-readable medium of claim 22 wherein each person window further comprises a view of an historical availability of the entity represented by the thumbnail.
- [c26] 26. The computer-readable medium of claim 23 wherein each person window further comprises a view of a calendar schedule for the entity represented by the thumbnail.
- [c27] 27. The computer-readable medium of claim 11 wherein each ticket is sharable between a first user and at least one additional user by sending each sharable ticket as an email attachment.
- [c28] 28. The computer-readable medium of claim 11 wherein at least one ticket is provided by dragging and dropping the ticket from a remote web site to at least one user display device.
- [c29] 29. The computer readable medium of claim 11 further comprising a network accessible database of tickets for allowing a user to access the tickets via any network accessible device.

- [c30] 30. The computer-readable medium of claim 11 wherein the user interface provides a capability for performing any of copying, cutting, pasting, deleting, adding, editing, and creating tickets via the user interface.
- [c31] 31. The computer-readable medium of claim 5 wherein the container is resizable.
- [c32] 32. The computer-readable medium of claim 31 wherein the container is automatically resized.
- [c33] 33. The computer-readable medium of claim 31 wherein the container is resized via the user interface.
- [c34] 34. The computer-readable medium of claim 31 wherein the dynamic thumbnails within the container are automatically resized as the container is resized.
- [c35] 35. The computer-readable medium of claim 34 wherein information provided by the dynamic thumbnails within the container automatically changes to accommodate the size of the automatically resized thumbnail as the container is resized.
- [c36] 36. The computer-readable medium of claim 11 wherein at least one of the tickets is created automatically.
- [c37] 37. The computer-readable medium of claim 11 wherein at least one of the tickets is created by dragging and dropping a link to a contact onto a graphical representation of the user interface.
- [c38] 38. The computer-readable medium of claim 1 wherein the persistent window is coverable by other windows.
- [c39] 39. The computer-readable medium of claim 1 wherein the persistent window is coverable by other windows in response to user interaction with the user interface.
- [c40] 40. The computer-readable medium of claim 1 wherein the persistent window is implemented using an auto-hide function.
- [c41] 41. A system for automatically providing dynamically updated information on a display device, comprising:
a user interface for specifying information of interest to be automatically tracked via

instructions embedded within at least one graphically represented customizable ticket;
at least one container displayed on the display device, each container holding at least one
of the graphically represented customizable tickets;
displaying each ticket as an individual thumbnail within one of the containers;
automatically tracking the information of interest via at least one communications access
point in accordance with the instructions embedded within each graphically represented
customizable ticket; and
dynamically providing the automatically tracked information of interest within each
thumbnail.

[c42]

42. The system of claim 41 wherein each customizable ticket comprises:
a definition of the information of interest;
a definition of how the information of interest is to be tracked; and
a definition of how the information of interest is to be displayed.

[c43]

43. The system of claim 41 wherein each customizable ticket is automatically transferred
to a user computing device via a communications interface.

[c44]

44. The system of claim 43 wherein automatically transferring the customizable ticket to
the user computing device comprises sending the customizable ticket to the user
computing device as an email attachment.

[c45]

45. The system of claim 43 wherein automatically transferring the customizable ticket to
the user computing device comprises using the user interface for dragging an iconized
representation of the customizable ticket from a remote web page and dropping the
iconized representation of the customizable ticket into one of the containers on the
display device.

[c46]

46. The system of claim 41 wherein at least one customizable ticket automatically reports
ticket use statistics to a remote server.

[c47]

47. The system of claim 41 wherein each customizable ticket is sharable between at least
two users.

[c48]

48. The system of claim 41 wherein each container is resizable via the user interface.

[c49]

49. The system of claim 48 wherein each thumbnail within a container is automatically

resized upon resizing the container.

- [c50] 50. The system of claim 49 wherein the information of interest provided by each thumbnail is automatically updated to accommodate an available display area of the thumbnail as the thumbnail is automatically resized.
- [c51] 51. The system of claim 41 wherein each container is movable via the user interface, and wherein any containers which come into contact are automatically snapped together to form a single container.
- [c52] 52. The system of claim 41 wherein at least two of the containers are nested together via the user interface to form at least one recursively nested group of containers.
- [c53] 53. The system of claim 41 wherein the user interface further comprises a wizard for automatically creating customizable tickets in response to a user input.
- [c54] 54. The system of claim 41 further comprising creating at least one recursively nested group of thumbnails in at least one container via the user interface, and wherein any group is capable of containing both thumbnails and nested groups of thumbnails.
- [c55] 55. The system of claim 54 wherein each nested group is represented by a group thumbnail.
- [c56] 56. The system of claim 55 wherein each group, and each thumbnail within each group, is accessible via the user interface, and wherein selecting any group expands that group to provide access to any groups and thumbnails contained within that group.
- [c57] 57. The system of claim 55 wherein each group thumbnail displays a summary of any thumbnails and groups nested within the recursively nested group represented by the group thumbnail.
- [c58] 58. The system of claim 41 wherein each thumbnail includes a visibility flag for either hiding or displaying each thumbnail.
- [c59] 59. The system of claim 58 wherein the visibility flag is set automatically.
- [c60] 60. The system of claim 58 wherein the visibility flag is set via the user interface.
- [c61] 61. The system of claim 41 wherein the thumbnails are timed, and wherein the

thumbnails are automatically displayed at predetermined times.

[c62] 62. The system of claim 61 wherein the displays of the automatically displayed thumbnails are automatically terminated at predetermined times.

[c63] 63. The system of claim 41 wherein at least one thumbnail represents a communications contact.

[c64] 64. The system of claim 63 wherein automatically tracking the information of interest comprises dynamically determining a real-time availability status of each communications contact via at least one contact method.

[c65] 65. The system of claim 64 wherein the real-time availability status of each contact is graphically represented in each thumbnail which represents a communications contact.

[c66] 66. The system of claim 65 each thumbnail is selectable via the user interface, and wherein a person window for providing detailed information for a contact represented by one of the thumbnails is automatically opened by selecting that thumbnail via the user interface.

[c67] 67. The system of claim 66 wherein each person window further comprises a list of actionable communication access points for the contact represented by the thumbnail, and wherein the communications with the contact are initiated via one or more of the actionable communication access points.

[c68] 68. The system medium of claim 66 wherein each person window further comprises an average historical availability of the contact represented by the thumbnail.

[c69] 69. The system of claim 66 wherein each person window further comprises a historical log of communications with the contact represented by the thumbnail.

[c70] 70. The system of claim 69 wherein the historical log of communications includes providing access to all communications between a user and the contact represented by the thumbnail.

[c71] 71. The system of claim 41 wherein each thumbnail is selectable via the user interface.

[c72] 72. The system of claim 71 wherein selection of any thumbnail causes the user interface

to automatically open an actionable tooltips window having extended information of interest.

[c73] 73. The system of claim 41 wherein visible alerts are automatically provided to alert a user to changes in the information of interest.

[c74] 74. The system of claim 41 wherein audible alerts are automatically provided to alert a user to changes in the information of interest.

[c75] 75. The system of claim 41 wherein a combination of visible and audible alerts are automatically provided to alert a user to changes in the information of interest.

[c76] 76. The system of claim 41 wherein an appearance of each thumbnail is changed over time to indicate the relative age of the information.

[c77] 77. The system of claim 41 wherein the appearance of each thumbnail is changed over time following an interruption in access to the information of interest.

[c78] 78. The system of claim 41 further comprising a software agent for automatically creating customizable tickets.

[c79] 79. The system of claim 78 wherein the automatically created tickets are timed tickets.

[c80] 80. The system of claim 41 wherein at least one thumbnail represents an email ticket for watching the contents of at least one email folder.

[c81] 81. The system of claim 80 wherein the contents of each watched email folder contact is graphically represented in each thumbnail which represents an email ticket.

[c82] 82. The system of claim 80 wherein an actionable email window for providing detailed information relating to each watched email folder is automatically opened by selecting that thumbnail via the user interface.

[c83] 83. The system of claim 41 further comprising a capability to automatically arrange thumbnails within the container.

[c84] 84. The system of claim 41 further comprising a capability to manually arrange thumbnails within the container.

- [c85] 85. The system of claim 41 wherein thumbnails are arranged within the container, and wherein particular thumbnails are assigned fixed positions within the container so that they are not moved as a result of arranging the thumbnails within the container.
- [c86] 86. A method for providing at least one user accessible dynamic object, said objects automatically providing dynamically updated information for display on a display device, comprising:
 using a user interface to place at least one link to information into at least one container;
 automatically creating the at least one user accessible dynamic object in response to placing the at least one link to information into the at least one container;
 dynamically tracking the information in response to instructions included in the automatically created dynamic object; and
 dynamically displaying the dynamically tracked information within the container on the display device.
- [c87] 87. The method of claim 86 wherein placing at least one link to information in the at least one container comprises dragging and dropping a graphical representation of the information into the container.
- [c88] 88. The method of claim 86 wherein placing at least one link to information in the at least one container comprises dragging and dropping a graphical representation of the information into the container from an Internet web page.
- [c89] 89. The method of claim 86 wherein each dynamic object includes at least one enhanced tooltip, and wherein each tooltip is accessible for display on the display device by selecting each dynamic object via the user interface.
- [c90] 90. The method of claim 89 wherein at least one of the enhanced tooltips is nested together with a parent tooltip, and wherein each nested tooltip is accessible for display on the display device by selecting each parent tooltip via the user interface.
- [c91] 91. The method of claim 86 wherein at least two dynamic objects are combined into at least one nested group of dynamic objects.
- [c92] 92. The method of claim 91 wherein each group is represented by an individual icon.
- [c93] 93. The method of claim 86 wherein each dynamic object is transferable to a remote

user.

[c94] 94. The method of claim 86 wherein each dynamic object is sharable between at least two users.

[c95] 95. The method of claim 86 wherein the dynamic object includes a visibility switch, and wherein the dynamically tracked information is only displayed within the container when the visibility switch is on.

[c96] 96. The method of claim 95 wherein the visibility switch is timed.

[c97] 97. The method of claim 86 wherein the dynamically tracked information is automatically cached.

[c98] 98. The method of claim 97 wherein the cached information is displayed when further information tracking is no longer possible.

[c99] 99. The method of claim 86 wherein an appearance of the dynamically displayed tracked information is automatically changed over time to indicate a relative age of the information.

09081816-06001
T03090-9E8060